WEST Search History

DATE: Wednesday, November 06, 2002

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L10	l1 and l9	36	L10
L9	l2 near l7	33895	L9
L8	l2 adjj1 l7	4278775	L8
L7	remov$4 or etch$4 or strip$4	3855013	L7
L6	5740192	20	L6
L5	5821555	6	L5
L4	l1 same l2	75	L4
L3	l1 near l2	3	L3
L2	cataly$$	740646	L2
L1	gan or (gallium adj nitride)	11912	L1

END OF SEARCH HISTORY

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L4: Entry 65 of 75 File: DWPI Aug 17, 2001

DERWENT-ACC-NO: 2002-185569
DERWENT-WEEK: 200224

TITLE: Stable gas sensor with gallium nitride and its manufacture

INVENTOR: LEE, D D; LEE, D S ; LEE, J H

PATENT-ASSIGNEE: LEE D D (LEEDI)

PRIORITY-DATA: 2000KR-0005119 (February 2, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
KR 2001077365 A	August 17, 2001		001	G01N027/407

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
KR2001077365A	February 2, 2000	2000KR-0005119	

INT-CL (IPC): G01 N 27/407

ABSTRACTED-PUB-NO: KR2001077365A

BASIC-ABSTRACT:

NOVELTY - A stable gas sensor and a manufacturing method thereof are provided to stabilize a response signal, and to restore efficiently in removing gas by using gallium nitride as a compound semiconductor instead of oxide semiconductor.

DETAILED DESCRIPTION - A stable gas sensor is composed of single crystal gallium nitride (2) formed in the front of a sapphire plate (1); an electrode (3) formed partially on the gallium nitride by a mask; a catalyst (4) deposited on the gallium nitride except the electrode; and a heater (5) made of titanium and platinum in the rear part of the sapphire plate. The surface of the sapphire plate is cleaned for 3 minutes, and a gallium nitride buffer layer is formed in the front of the plate at the temperature of 500 degrees C. The single crystal of gallium nitride is formed in the plate at the temperature of 1020 degrees C, and the electrode is formed with depositing titanium and platinum in the gallium nitride. The platinum or gold as a catalyst is plated on the gallium nitride, and titanium and platinum are plated in the rear face of the sapphire plate to manufacture the heater.

ABSTRACTED-PUB-NO: KR2001077365A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/10

DERWENT-CLASS: J04 L03 S03
CPI-CODES: J04-C04; L03-E05C; L04-A02A1; L04-C11C; L04-E;
EPI-CODES: S03-E03C; S03-E14P;

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L4: Entry 64 of 75 File: DWPI Jan 25, 2002

DERWENT-ACC-NO: 2002-178976
DERWENT-WEEK: 200223

TITLE: P-type gallium nitride-based compound semiconductor production, used for light-emitting devices, involves forming catalyst layer on p-type gallium nitride-based compound semiconductor layer, and annealing the layers

INVENTOR: FUJIOKA, H; HASAYUKI, M ; OKUYAMA, M ; OSHIMA, M ; WAKI, I ; MIKI, H

PATENT-ASSIGNEE: SHOWA DENKO KK (SHOW)

PRIORITY-DATA: 2000JP-0207701 (July 10, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2002026389 A	January 25, 2002		011	H01L033/00
US 20020004254 A1	January 10, 2002		013	H01L021/00
EP 1172867 A2	January 16, 2002	E	000	H01L033/00

DESIGNATED-STATES: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP2002026389A	July 10, 2000	2000JP-0207701	
US20020004254A1	November 14, 2000	2000US-247991P	Provisional
US20020004254A1	July 10, 2001	2001US-0900962	
EP 1172867A2	July 4, 2001	2001EP-0305791	

INT-CL (IPC): C23 C 16/34; H01 L 21/00; H01 L 21/205; H01 L 21/324; H01 L 33/00

ABSTRACTED-PUB-NO: US20020004254A
BASIC-ABSTRACT:

NOVELTY - A p-type gallium nitride-based compound semiconductor is produced by forming a gallium nitride-based compound semiconductor layer doped with p-type impurity. A catalyst layer, which comprises a metal, an alloy or a compound, is provided on the semiconductor layer. The resulting semiconductor layer fixed with the catalyst layer is then annealed.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(A) the production of a gallium nitride-based compound semiconductor light-emitting device; and

(B) a gallium nitride-based compound semiconductor light-emitting device obtained in (A).

The light-emitting device is produced by providing an n-type layer, a light-emitting layer, and the above p-type gallium nitride-based compound semiconductor. Each of the n-type layer and the light-emitting layer comprises a gallium nitride-based compound semiconductor.

USE - Production of a p-type gallium nitride based compound semiconductor for use in the production of a gallium nitride-based compound semiconductor light-emitting device.

ADVANTAGE - The process provides a p-type gallium nitride-based compound semiconductor, which has a p-type gallium nitride-based compound semiconductor layer that can fully exert the p-type function. Thus, when a light-emitting device is manufactured, good contact properties can be kept between the p-type gallium-based compound semiconductor layer and the electrode, and the properties of the light-emitting device can be improved.

ABSTRACTED-PUB-NO: US20020004254A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.0/4

DERWENT-CLASS: L03 U12
CPI-CODES: L04-A02A1A; L04-C02; L04-C16A; L04-E03;
EPI-CODES: U12-A01A1A; U12-A01A2;